

# SERVICE MANUAL PARTS LIST

## UPRIGHT VACUUM CLEANER

**MODELS:** 

**U-40** 



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#### I.-FINAL TEST FOR PRODUCT SAFETY

After repairs the product should be tested on its electrical function and electric strength as follows.

#### 1.-ELECTRIC TEST

- 1. Set hi-pot test meter at 1500 Volts
- 2. Place the handles tube to "ON" position
- 3. Touch one probe of tester to one blade of power cord plug and touch other probe to handle tube, there should be no breakdown.

#### 2.-OPERATING TEST

Run the machine with the height adjustment knob on high and check:

- 1. There should be no unusual noise or vibration.
- 2. The carbon brushes spark should be small and uniform.
- 3. The current should not exceed 9.0 Amps. and 7.0 Amps

#### II. REPLACEMENT PROCEDURES

#### 1.-TO REMOVE BAG (8), FIG. 1

1.1.-Release spring, from handle, slide off coupling unit.

#### 2.-TO REMOVE HANDLE TUBE (2, 9) FIG.1 v FIG.2

- 2.1.-Disengage line cord from hook (5) pulling cord outward from retainer bottom
- 2.2.-Remove screws and nuts (15 and 7) on handle socket (24) and pull tube out.

#### 3.-TO REPLACE BELT (25), FIG.2

- 3.1.-To avoid damage on the cover place the upright upward wheels in a soft surface.
- 3.2. Remove retaining bar (22) by pressing down on right side (Longest), remove brush rollers cover (23) and assembly turbine cover (43).
- 3.3.-Stretch and twist belt over motor pulley to pull it out. (if not broken)
- 3.4.-Remove complete brush roller (21) with bearing supports (21B and 21E) pulling it out near the bearings.
- 3.5.- Place new belt on roller, replace roller on chassis making sure the mark "top" on bearings support faces towards the brush roller cover and reassemble.

#### 4.-TO REPLACE BRUSH ROLL (21) OR BEARING SUPPORTS FIG. 2.

- 4.1.-Follow steps 3.1 to 3.4.
- 4.2.-Remove bearing support (21-B), pulling away from them brush roller (old or new).
- 4.3.-Place bearing supports on new brush roll, place belt over roll and replace to on chassis following steps 3.5.

#### 5.-TO REPLACE REAR WHEELS (5), FIG.2

- 5.1.-Remove cover (step 7)
- 5.2. Pull security (6) from axle (41) and axle assembly take out.
- 5.3.-The wheels new replace on the axle.
- 5.4.-Replace Cover

#### 6.-TO REPLACE FRONT WHEELS (14-I), FIG. 3, 4

- 6.1.-Remove cover (step 7)
- 6.2.-Remove screws (7) from axle supports (13) and axle assembly take out.
- 6.3.-Remove axle with wheels
- 6.4.-The wheels new replace on the axle.
- 6.5.-Axle assembly replace on chassis.
- 6.6.-Replace Cover

#### 7.-TO REMOVE THE COVER (2), FIG. 1 AND FIG.2

- 7.1.-Remove the bag (8) (Fig. 1)
- 7.2.-Depress handle release pedal (39) and put on horizontal position the handle tube
- 7.3.-Remove the screw (14) and adjustment knob (1) (Fig.2)
- 7.4.-To avoid damage on the cover place the upright upward wheels in a soft surface, remove the insurance

#### 8.-TO REPLACE MOTOR (51), FIG 2.

- 8.1.-Remove belts follow steps 3.1 to 3.3.
- 8.2.-Remove cover (step 7).
- 8.3.-Remove four screws (4) holding the motor and disconnect it.
- 8.4.-Replace the motor (51)

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#### 9.-TO REPLACE HEIGHT ADJUSTMENT CAM (I5), FIG.2

- 9.1.-Depress handle release pedal (39) and put on horizontal position the handle tube...
- 9.2.-Remove the screw (14) and the adjustment knob (1)
- 9.3.-Remove the spring and screw (44), to remove the retain cam plate.

#### 10.-TO REPLACE HANDLE RELEASE PEDAL (39) FIG. 2

- 10.1.-Remove cover (step 7)
- 10.2.-Remove spring (40) from chassis
- 10.3.-Pull pedal towards spring side and remove

#### 11.-TO REPLACE YOKE ASSEMBLY (24), FIG.2

- 11.1.-Remove cover (step 7)
- 11.2.-Remove handle release pedal (step 10)
- 11.3.-Remove the bolt yoke (31), along with the security locks (20)

#### 12.-TO REPLACE THE CABLE ASSEMBLY (25), FIG. 2

- 12.1.-Remove cover (step 7)
- 12.2.-Remove Heyco strain relief (26) from chassis with Heyco
- 12.3.-Reassemble with the Hey co pliers making sure to locate the strain relief as it was before.

#### 13.-TO REPLACE THE ON - OFF SWITCH (48), FIG. 2

- 13.1.-Remove cover (step 7)
- 13.2.-Disconnect the electrical terminal from the switch.
- 13.3.-Press the side tabs on the switch and pull it out.
- 13.4. Press the new switch on the opening until the tabs snaps and reconnects the terminal.

#### 14.-TO REPLACE THE SWITCH ACTUATOR (50), FIG.2

- 14.1.-Remove cover (step 7)
- 14.2.-Of the actuator assembly remove the yoke (24).
- 14.3.-Replace the new actuator and assembly.

#### 15.-MOTOR SERVICING.

The only possible motor repairs are: Replace carbon brushes, replace armature, replace field. **Never try to repair the field or armature, if defective, replace with a new one**.

#### WHEN ORDERING, DO NOT FORGET TO SPECIFY:

- ✓ PART NUMBER
- **✓ DESCRIPTION**
- ✓ MODEL NUMBER

### NOTE: Drawing numbers are for identification purposes only. III.-TROUBLE SHOOTING CHART.

PROBLEM	POSSIBLE CAUSE	SOLUTION
	1 Not firmly plugged in.	1 Check attachment plug.
A) Motor does not	2 Bad ON-OFF switch.	2 Replace switch.
work	3 Line cord open	3 Replace cord.
	4 Motor open	4 Check motor and wiring.
	5 Fan blockage by material	5 Remove obstruction
B) Motor works but	1 Belt broken.	1 Replace belt.
cleaner does not	2 Blockage air system.	2 Remove obstruction.
aspire	3 Fan broken.	3 Replace fan.
	4 Worn brush roller.	4 Replace brush roller.
	5 Motor slow.	5 Check carbon brushes.
	6 Bag full.	6 Empty bag (or change paper bag).
C) Motor works er-	1 Worn carbon brushes.	1 Replace brushes.
ratically	2 Detective armature.	2 Check spark, replace
	3 Bad electrical connection.	3 Check wiring.
	4 Detective On-Off switch.	4 Replace switch.
D) Brush roll vi-	1 Ball bearing worn out	1 Replace
brates.	2 Ball bearing holder damaged	2 Replace ball bearing holder.
E) Head light does	1 Bad connections.	1 Check wiring.
not run on	2 Light bulb burned out.	2 Replace bulb.

#### IV.-UPRIGHT VACUUM CLEANER EXTERNAL PARTS

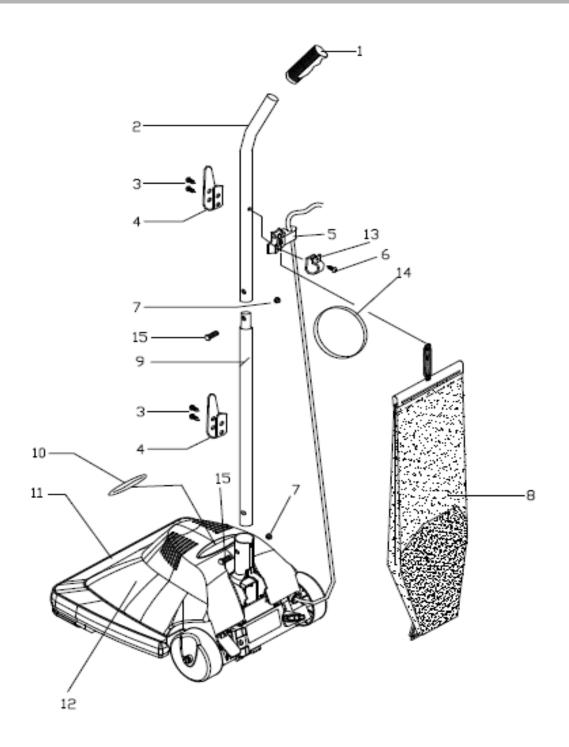


FIG. 1

### V.-PARTS LIST UPRIGHT VACUUM CLEANER

ITEM	No. PART	QTY	DESCRIPTION
1	13-0947-5	1	HANDLE GRIP
2	05-4091-01-2	1	BLACK TUBE TOP U-75
3	01-0290-5	4	SCREW 10 X 3/8
4	05-4089-01-6	2	CORD HOOK
5	13-1462-4	1	HOOK LINE CABLE
6	01-0283-0	1	SCREW 8 X 1/2
7	02-0141-8	2	NUT
8	46-3231-1	1	PERMANENT BLACK CLOHT
9	05-4090-01-4	1	LOWER HANDLE BLACK
10	17-5071-0	1	LABEL COVER UPRIGHT
11	13-2883-01-8	1	PLASTIC CHASSIS
12	13-2949-01-7	1	PLASTIC COVER UPRIGHT
13	13-0304-9	1	CORD RETAINER
14	12-0814-9	1	BELT 210 X 13 7/16-83A
15	01-2034-01-3	2	SCREW HANDLE

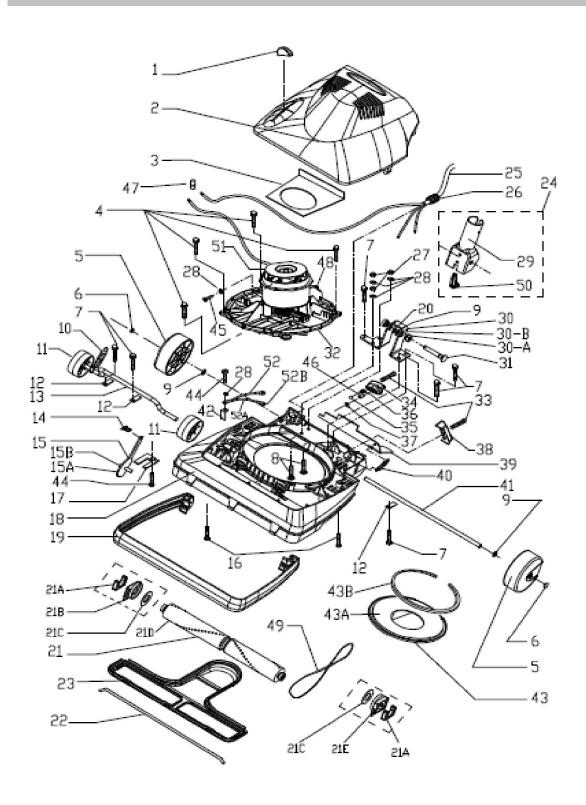


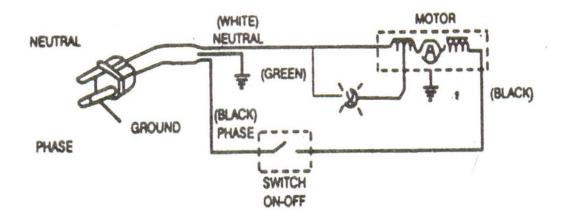
FIG. 2

### VII.-PARTS LIST UPRIGHT VACUUM CLEANER

ITEM			ST UPRIGHT VACUUM CLEANER
ITEM	No PART	QTY	DESCRIPTION
1	13-3147-9	1	KNOB CAM
2	13-2949-01-7	1	PLASTIC COVER UPRIGHT U-40
3	12-0936-0	1	BAFFLE
4	01-15006	4	SCREW B 10-16X3/4
5	13-3144-6	2	REAR WHEEL
6	04-0671-0	2	BLIND SECURITY TYPE HAT
7	01-1499-1	6	SCREW HEX No 10-16X5/8
8	01-0664-1	2	SCREW 10X5/8
9	04-0589-4	3	FLAT WASHER 5/16x1/2
10	24-0308-7	1	FRONT AXLE SPRING
11	13-3143-8	2	FRONT WHEEL
12	05-4489-0	3	RETEN PLATE SHAFT
13	25-1349-02-3	1	FRONT AXLE GALVANIZED
14	01-1651-7	1	SCREW TYPE BT No 6
15	46-3206-3	1	CAM ASSEMBLY
15-A	05-4722-4	1	CAM UPRIGHT
15-B	25-1345-5	1	BOLT FOR CAM
16	01-0093-3	2	SCREW No 6 X 5/8 TYPE BC/PHILLIPS
17	05-4721-6	1	RETEN CAM PLATE
18	13-2883-01-8	1	PLASTIC CHASSI U-40
19	12-0952-7	1	UPRIGHT FOR PLASTIC MOLDING
20	04-0469-9	1	SECURITY PADLOCK PO-25
21	46-2375-7	1	BRUSH ROLL ASSEMBLY
21-A	12-0522-8	1	PACKING FOR CARRIER BEARING
21-B	13-1801-3	1	CARRIER BEARING LEFT
21-C	37-0130-7	2	FELT FOR CARRIER BEARING
21-D	45-0299-3	1	ROLLER ASSEMBLY SOWS
21-E	13-1252-9	1	CARRIER BEARING 11/16
22	25-0997-4	1	RETEN ROD ROLLER COVER
23	46-3207-1	1	ROLLER ASSEMBLY COVER TILT
24	46-3433-3	1	SWITCH-ACTUATOR YOKE ASSEMBLY
25	28-1644-01-3	1	CABLE ASSEMBLY LINE U-40
26	12-0953-5	1	GROMET HEYCO 1232
27	02-0041-0	3	NUT HEX. No 10-24
28	04-0271-9	5	STAR WASHER No 10X204
29	05-4734-02-5	1	CHROME YOKE
30	46-3260-0	1	SUPPORT YOKE BUSHING ASSEMBLY
30-A	13-3148-7	2	YOKE BUSHING
30-B	05-4725-7	1	SUPPORT YOKE
31	25-1346-3	1	PIN FOR YOKE
32	12-0495-01-5	1	PACKING SEAL MOTOR BASE
33	01-0285-5	2	SCREW DE 8x3/4
34	13-2126-4	1	KNOB FOR EXCHANGE COUPLINGS
35	26-0001-3	1	FORK BULLETS LOCA
36	24-0014-1	1	KNOB SPRING FOR SWEEPER
37	04-0026-7	1	FLAT WASHER (02-0101)
38	13-2127-2	1	COUPLINGS RETEN BAG
39	05-4724-02-6	1	PEDAL HANDLE GALVANIZED
40	24-0316-0	<u>'</u> 	PEDAL SPRING HANDLE UPRIGHT
	<u>_</u> +0010-0	'	· LD/ L OI I III YO I V W YDLL OI I IIOI II

ITEM	No PART	QTY	DESCRIPTION
41	25-1322-4	1	REAR WHEEL AXLE
42	05-4993-1	1	ANGLE FOR SOIL
43	46-3208-9	2	TURBINE COVER WITH SEAL ASSEMBLY
43-A	13-3145-3	1	TURBINE COVER
43-B	12-0834-7	1	TURBINE SEAL COVER GASKET
44	01-0270-7	2	SCREW 6X3
45	01-1683-0	1	SCREW TYPE T 8-32
46	05-0997-6	1	MOTOR SPACER
47	10-0137-9	1	STAPLE INSULATED CONNECTOR
48	11-0159-1	1	ROCKER SWICTH
49	12-0814-01-7	1	BELT 210 X 13 7 / 16 83 A
50	13-3273-3	1	ACTUATOR SWITCH
51	46-3383-0	1	MOTOR UPRIGTH 5A
52	28-1664-3	1	CABLE ASSEMBLY GROUND
52-A	09-1319-4	2	CABLE GREEN EARTH
52-B	30-0197-1	3	CONNECTION TERMINAL A

#### VIII.-WIRING DIAGRAM





#### **FACTORY AUTHORIZED SERVICE**

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